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T130/TELNP202USA

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently amended) A system for scanning a target, comprising:  
a light source providing a light beam;  
a reflector having an arcuate reflective surface with a variable shape;  
a shape controlling system for controlling said the shape of said the reflector; and  
a beam expander with a generally cylindrical reflective outer surface; and  
said the reflector reflecting a first portion of said the light beam from said the light source onto said the beam expander, said the beam expander reflecting at least a second portion of said the first portion of said the light beam onto said the target, and said the shape controlling system selectively varying said the shape of said the reflector, whereby said the second portion scans across at least a portion of said the target.
2. (Currently amended) The system of claim 1, further including a photo sensor, wherein said the target reflects at least a portion of said the second portion of light onto said the photo sensor and said the photo sensor generates an electrical signal representative of said the at least a portion of said the second portion of light.
3. (Currently amended) The system of claim 1, ~~wherein~~ said the reflector includes a piezoelectric material with an arcuate reflective surface.
4. (Currently amended) The system of claim 1, ~~wherein~~ said the shape of said the reflector is generally radial.
5. (Currently amended) The system of claim 1, ~~wherein~~ said the shape controlling system provides a voltage signal to said the piezoelectric material, and said the shape of said the reflector

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is varied according to ~~said~~ the voltage signal.

6. (Currently amended) The system of claim 5, ~~wherein said~~ the shape of ~~said~~ the reflector is generally radial.

7. (Canceled)

8. (Currently amended) The system of claim 6, ~~wherein said~~ the beam expander has a generally spherical reflective outer surface.

9. (Currently amended) The system of claim 6, ~~wherein said~~ the beam expander includes a convex arcuate reflective surface.

10. (Currently amended) The system of claim 1, ~~wherein said~~ the beam expander includes a convex arcuate reflective surface.

11. (Canceled)

12. (Currently amended) The system of claim 6, further including a photo sensor, wherein ~~said~~ the target reflects at least a portion of ~~said~~ the second portion of light onto ~~said~~ the photo sensor and ~~said~~ the photo sensor generates an electrical signal representative of ~~said~~ the at least a portion of ~~said~~ the second portion of light.

13. (Currently amended) The system of claim 12, further including a conversion and interface system receiving ~~said~~ the electrical signal from ~~said~~ the photo sensor and converting ~~said~~ the electrical signal to a digital code.

14. (Currently amended) The system of claim 2, further including a conversion and interface system receiving ~~said~~ the electrical signal from ~~said~~ the photo sensor and converting ~~said~~ the electrical signal to a digital code.

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15. (Currently amended) A method of scanning a target, comprising the steps of:  
providing a reflector having an arcuate reflective surface with a variable shape;  
providing a beam expander with a cylindrical reflective outer surface;  
providing a light beam from a light source to said the reflector;  
reflecting a first portion of said the light beam off of said the reflector and onto said the beam expander;  
reflecting a second portion of said the light beam off of said the beam expander and onto said the target; and  
varying said the shape of said the ~~reflector~~, reflector, thereby scanning at least a portion of said the target with said the second portion of said the light beam.
16. (Currently amended) The method of claim 15, further including providing a control system with a control signal, wherein said the shape of said the reflector varies according to said the control signal.
17. (Currently amended) The method of claim 16, ~~wherein~~ said the reflector includes a piezoelectric material having at least two electrodes, and said shape varies according to the voltage across said electrodes.
18. (Currently amended) The method of claim 16, ~~wherein~~ said the beam expander includes a convex arcuate reflective surface.
19. (Canceled)
20. (Currently amended) The method of claim 15, ~~wherein~~ said the beam expander has a generally cylindrical reflective outer surface.

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21. (Currently amended) A target scanning apparatus, comprising:

a housing having generally horizontal top and bottom sides, generally vertical left and right sides, ~~said the~~ sides extending longitudinally between generally vertical front and rear ends;

a scanning system mounted in ~~said the~~ housing and having a reflector with a variable shape arcuate convex reflective surface, a light source providing a light beam to ~~said the~~ reflector, and a control system adapted to control ~~said the~~ shape of ~~said the~~ reflector;

a ~~mirror~~ cylindrical reflective surface displaced from ~~said the~~ reflector in ~~said the~~ housing near one of ~~said the~~ front and rear ends; and

an aperture in one of ~~said the~~ sides near ~~said the~~ one of ~~said the~~ front and rear ends;

~~said the~~ reflector reflecting a first portion of ~~said the~~ light beam onto ~~said mirror, and said mirror being~~ the cylindrical reflective surface which is oriented so as to reflect a second portion of ~~said the~~ light beam from ~~said the~~ reflector through ~~said the~~ aperture and onto ~~said the~~ target, and ~~said the~~ control system varying the shape of ~~said the~~ reflector whereby ~~said the~~ second portion of ~~said the~~ light beam scans at least a portion of ~~said the~~ target, whereby ~~said the~~ light beam is expanded.

22. (Canceled)

23. (Currently amended) A system for scanning a target, comprising:

means for providing a light beam;

reflector means for reflecting a first portion of ~~said the~~ light beam;

expander means for reflecting a second portion of ~~said the~~ light beam from ~~said the~~ reflector means onto ~~said the~~ target, the expander means comprising a polished round pillar having a cylindrical reflective outer surface; and

means for varying ~~said the~~ shape of ~~said the~~ reflector means, by which at least a portion of ~~said the~~ target is scanned with ~~said the~~ second portion of ~~said the~~ light beam.